



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**VOLVO L120G 31407**  
Component  
**Hydraulic System**  
Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample Comment: 17,722 actual machine hours )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ML0001527</b>	VCP331646	VCP297102
Sample Date		Client Info		<b>08 Jul 2024</b>	22 Nov 2021	22 Dec 2020
Machine Age	hrs	Client Info		<b>17722</b>	13590	19991
Oil Age	hrs	Client Info		<b>8000</b>	1590	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>14</b>	10	17
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	2	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	1
Copper	ppm	ASTM D5185m	>150	<b>3</b>	2	5
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

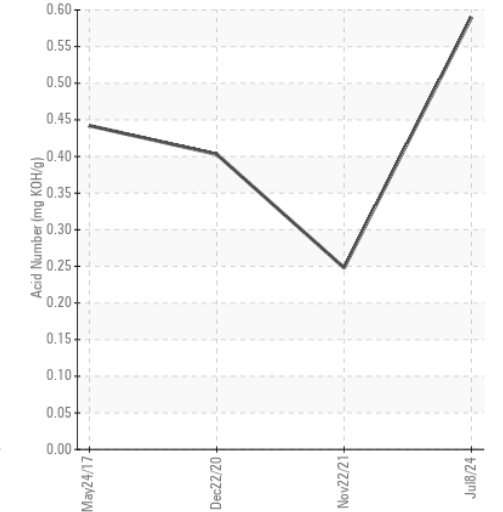
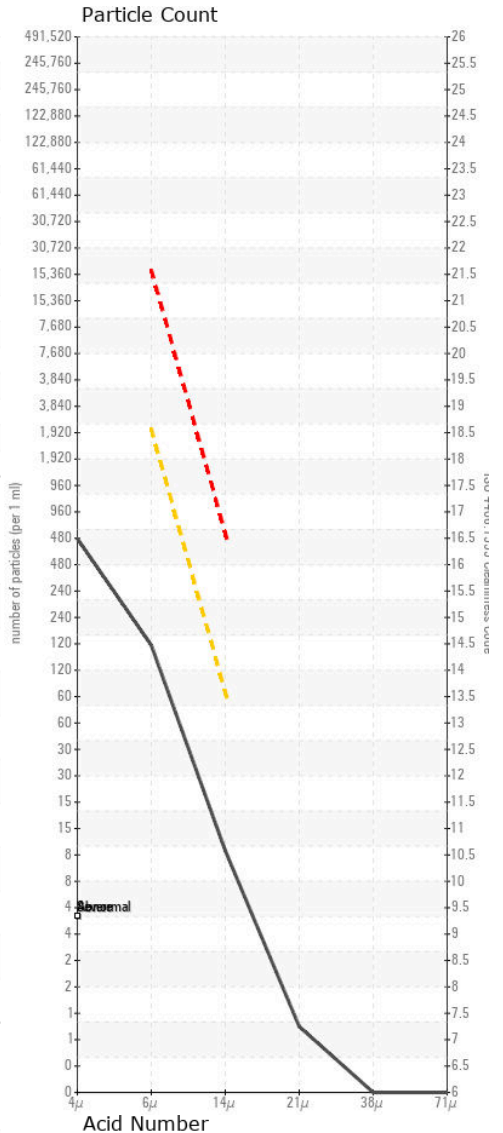
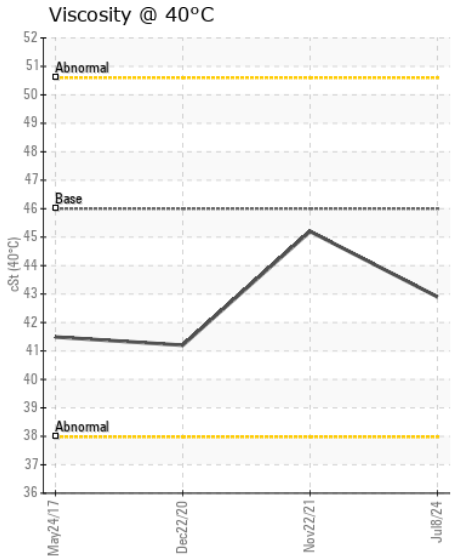
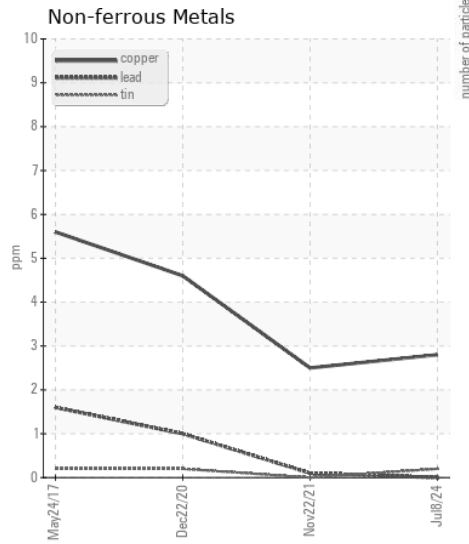
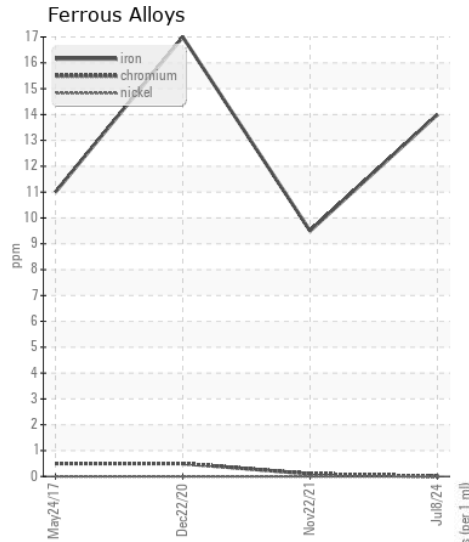
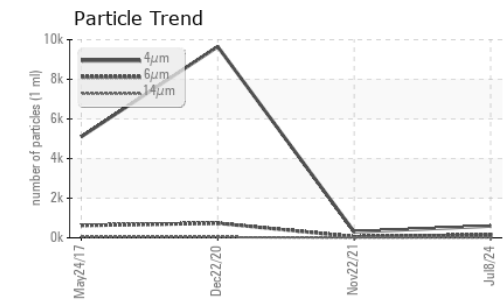
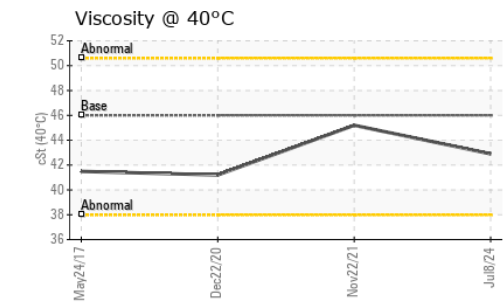
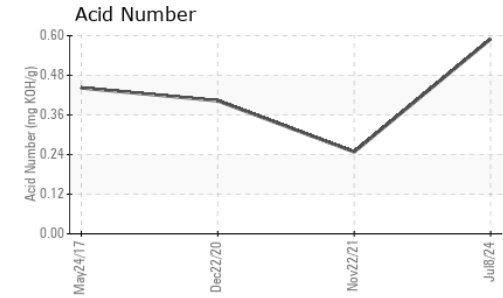
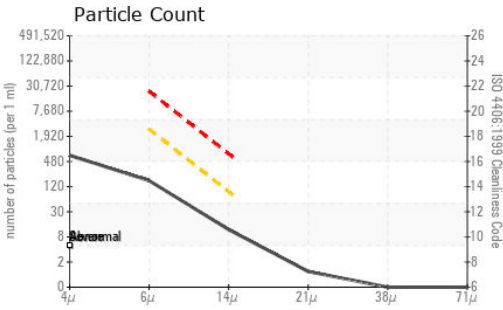
The amount and size of particulates present in the system is acceptable. There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m	>20	<b>12</b>	7	8
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>593</b>	303	9650
Particles >6µm		ASTM D7647	>2500	<b>147</b>	55	737
Particles >14µm		ASTM D7647	>80	<b>10</b>	6	34
Particles >21µm		ASTM D7647	>20	<b>1</b>	2	13
Particles >38µm		ASTM D7647	>4	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	<b>16/14/10</b>	15/13/10	20/17/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>5</b>	2	2
Boron	ppm	ASTM D5185m	14	<b>8</b>	12	8
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<b>3</b>	5	<1
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	<b>196</b>	35	13
Calcium	ppm	ASTM D5185m	49	<b>188</b>	237	330
Phosphorus	ppm	ASTM D5185m	354	<b>611</b>	396	411
Zinc	ppm	ASTM D5185m	419	<b>682</b>	445	535
Sulfur	ppm	ASTM D5185m	3719	<b>4292</b>	2199	3819
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.59</b>	0.248	0.403
Visc @ 40°C	cSt	ASTM D445	46	<b>42.9</b>	45.2	41.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : ML0001527

**Lab Number** : 06232230

**Unique Number** : 11115723

**Test Package** : CONST ( Additional Tests: PQ )

**Received** : 10 Jul 2024

**Tested** : 11 Jul 2024

**Diagnosed** : 11 Jul 2024 - Don Baldridge

**MCCLEUNG-LOGAN EQUIPMENT CO - RICHMOND**

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)